MAT.04.TE.2.00NBT.E.054 Claim 2

Sample Item ID:	MAT.04.TE.2.00NBT.E.054
Grade:	04
Primary Claim:	**Claim 2: Problem Solving** Students can solve a range of well-posed problems in pure and applied mathematics, making productive use of knowledge and problem-solving strategies.
Secondary Claim(s):	Claim 1: Concepts and Procedures Students can explain and apply mathematical concepts and carry out mathematical procedures with precision and fluency.
Primary Content Domain:	Numbers and Operations in Base Ten
Secondary Content Domain(s):	
Assessment Target(s):	2 D: Identify important quantities in a practical situation and map their relationships. 1 E: Use place value understanding and properties of operations to perform multi-digit arithmetic.
Standard(s):	4.NBT.6
Mathematical Practice(s):	1, 2, 4
DOK:	2
Item Type:	TE
Score Points:	2
Difficulty:	
Key:	See Sample Top-Score Response.
Stimulus/Source:	
Target-specific attributes (e.g., accessibility issues):	TEI Template Specification: Tiling
Notes:	Response box will accept up to three numeric entries.

There are 37 students in a class. Students go to a science lab in groups that contain no more than 7 students. Make a model to show the fewest number of science lab groups that will need to be formed with these 37 students.

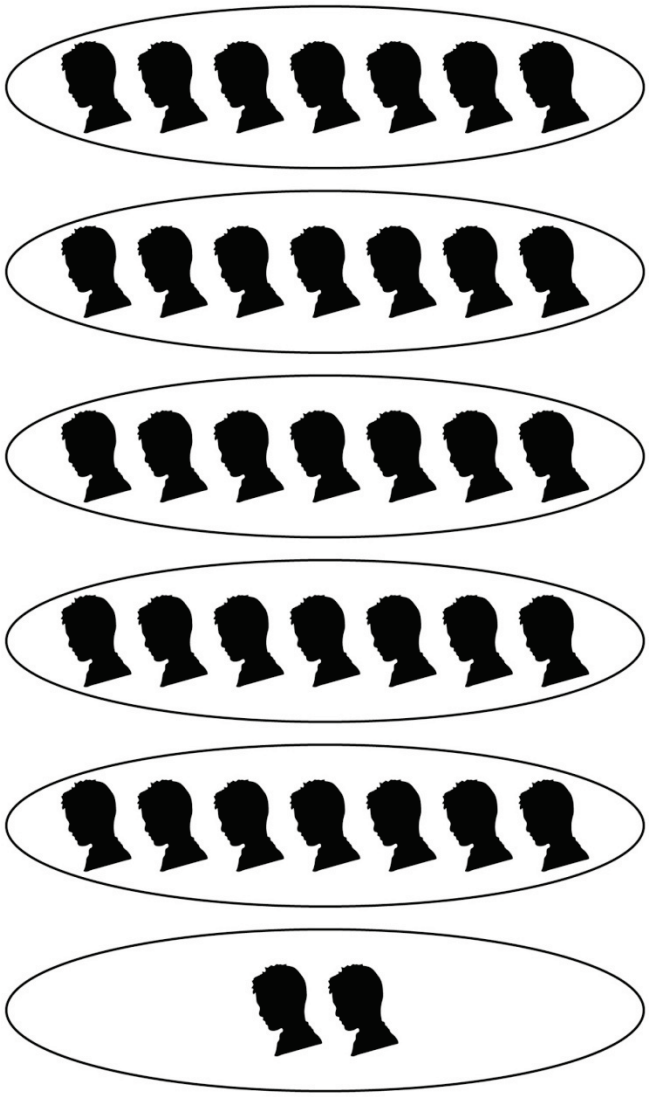
Click on an oval to make a group. Continue as many times as necessary to make the correct number of groups.
[When an oval is clicked, an oval will be created in the working space.]

Click on a student and then click on an oval to put the student in a group. Continue as many times as necessary.
[When a student icon is clicked and then an oval is clicked, student icons snap to position in the oval to allow for multiple icons.]

What is the fewest number of science lab groups that will need to be formed with these 37 students?

☐ lab groups

Sample Top-Score Response:



Student creates model with 6 groups containing a total of 37 students, with no more than 7 students in each group.

6 lab groups

Scoring Rubric:

Responses to this item will receive 0–2 points, based on the following:

2 points: The student has thorough understanding of finding whole-number quotients and remainders. The student creates a model that shows 6 groups containing a total of 37 students, with no more than 7 students in each group. The student also answers 6 to the question.

1 point: The student has partial understanding of finding whole-number quotients and remainders. The student's model contains a minor error but still shows understanding of modeling in a division situation. **OR** The student models only 5 equal groups, does not consider the remainder, and answers 5 to the question.

0 points: The student has little or no understanding of finding whole-number quotients and remainders. The student's model does not show understanding of division and remainders. The student does not answer 6 to the question.